CONTENTS

R. R. Archer: Stability limits for a clamped spherical shell segment under uniform pressure 355
M. A. Biot: A new approach to the non-linear problems of FM circuits. 1
W. F. Cahill (*see J. L. Synge*)
N. Coburn: Intrinsic form of the characteristic relations in the steady supersonic flow of a compressible fluid 237
R. C. Davis: Optimum vs. correlation methods in tracking random signals in background noise 123
C. Nevin De Silva and P. M. Naghdi: Asymptotic solutions of a class of elastic shells of revolution with variable thickness 169
R. C. DiPrima: On the diffusion of tides into permeable rock of finite depth. . . . 329
W. S. Dorn and H. J. Greenberg: Linear programming and plastic limit analysis of structures 155
S. A. Dressin and E. Reich: Priority assignment on a waiting line 208
D. C. Drucker and R. T. Shield: Bounds on minimum weight design 269
R. J. Duffin: A note on Poisson's integral 109
K. Eisemann: Removal of ill-conditioning for matrices 225
R. A. Eubanks (*see E. Sternberg*)
E. Feuerstein: Intermodulation products for ν-law biased wave rectifier for multiple frequency input 183
A. E. Green, J. R. M. Radok, and R. S. Rivlin: Thermo-elastic similarity laws. . 381
H. J. Greenberg (*see W. S. Dorn*)
F. S. Ham: Expansions of the irregular Coulomb function 31
H. S. Heaps: The reflection coefficient of a surface of Raleigh distributed impedance 291
G. Horvay: Biharmonic eigenvalue problem of the semi-infinite strip 65
M. W. Johnson and E. Reissner: On transverse vibrations of shallow spherical shells 367
W. T. Koiter: An elementary solution of two stress concentration problems in the neighborhood of a hole. 303
A. Leitner (*see C. P. Wells*)
M. Lessen: The motion of thermoelastic solid 105
P. Mann-Nachbar: The interaction of an acoustic wave and an elastic spherical shell 83
S. H. Maslen and S. Ostrach: Note on the aerodynamic heating of an oscillating insulated surface 98
D. Middleton (*see J. A. Mullen*)
J. A. Mullen and D. Middleton: The rectification of non-Gaussian noise. 395
J. D. Murray: Two-dimensional compressible shear flow in a channel 231
P. M. Naghdi: The effect of transverse shear deformation of the bending of elastic shells of revolution 41
P. M. Naghdi (*see C. Nevin De Silva*)
W. Noll: On the rotation of an incompressible continuous medium in plane motion 317
S. Ostrach (*see S. H. Maslen*)

A. Papoulis: Limits on the zeros of a network determinant 193
D. H. Parsons: One-dimensional diffusion with the diffusion coefficient a linear function of concentration 298
C. E. Pearson: On the finite strip problem 203
J. R. M. Radok: Visco-elastic stress analysis 198
J. R. M. Radok (*see A. E. Green*)
E. Reich (*see S. A. Dressin*)
E. Reissner (*see M. W. Johnson*)
R. S. Rivlin: The relation between the flow of non-Newtonian fluids and turbulent Newtonian fluids 212
R. S. Rivlin (*see A. E. Green*)
R. S. Rivlin (*see G. F. Smith*)
R. M. Rosenberg: On the periodic solutions of the forced oscillator equation . . . 341
R. Sedney: Some aspects of three-dimensional boundary layer flows 113
Chi-Neng Shen: On the solution of a differential equation with non-linearity appearing in the second derivative of combined linear and cubic terms. . . . 11
R. T. Shield: The application of limit analysis to the determination of the strength of butt joints. 139
R. T. Shield (*see D. C. Drucker*)
G. F. Smith and R. S. Rivlin: The anisotropic tensors 308
E. Sternberg and R. A. Eubanks: On stress functions for elastokinetics and the integration of the repeated wave equation. 149
D. E. Stone: On the non-existence of rectilinear motion in plastic solids and non-Newtonian fluids 257
S. Süray: On the analytic functions of order n 283
J. L. Synge and W. F. Cahill: The torsion of a hollow square 217
H. S. Tan: Waves produced by a pulsating source travelling beneath a free surface 249
C. Truesdell: Geometric interpretation for the reciprocal deformation tensors . . . 434
W. R. Wasow: The accuracy of difference approximations to plane Dirichlet problems with piecewise analytic boundary values 53
J. H. Weiner: A uniqueness theorem for the coupled thermoelastic problem . . . 102
C. P. Wells and A. Leitner: A Lebedev transform and the "baffle" problem . . . 430
V. H. Weston: Solutions of the Helmholtz equation for a class of non-separable cylindrical and rotational coordinate systems 420
J. C. Wilson: Heat transfer at rectangular corners 195
A. Wintner: On the conditions of validity of Riemann's method of integration. . . 94
A. Wintner: Energy dissipation and linear stability. 263
A. Wintner: On a principle of reciprocity between high- and low-frequency problems concerning linear differential equations of second order. 314
A. Wintner: On linear pertubations. 428
S. V. Yadavalli: On some effects of velocity distribution in electron streams. . . . 111
Book Reviews . . . . . 40, 64, 82, 112, 148, 154, 168, 216, 256, 282, 320, 340, 435.